

Abstract

Provided is a bonding method in which two or more different members are bonded through a fitting structure by forming a bonding layer of an adhesive composition controlled in expansion coefficient, even if the clearance between wall surfaces of the different members in the fitting structure is not enough to pour a given amount of a hard solder therein, and a composite member made by the method is further provided.

The above method comprises a step of uniformly spreading a fine particle material over the surface of the dented portion of the member having the dented portion, then disposing a platy or powdery hard solder so as to cover at least a part of the layer comprising the fine particle and further disposing the member having the protruded portion, a step of uniformly spreading a fine particle material over the surface of the dented portion of the member having the dented portion and disposing the member having a protruded portion having one or a plurality of holes in which a hard solder is inserted so that the member closely contacts with the layer comprising the fine particle material, or a step of previously preparing the member having a protruded portion at the end of which is formed a layer comprising a hard solder and a fine particle material, disposing a hard solder on the surface of the dented portion of the member having the dented portion and disposing thereon the member having the protruded portion,

and a step of heating them to a given temperature under application of pressure to melt the hard solder and impregnating the fine particle material with this molten hard solder to form

a bonding layer comprising the hard solder and the fine particle material, thereby to bond the different members through the fitting structure.

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